

(11) **1359 005**

(19)



iii) a sensory stimulus generator adapted to stimulate the eye, ear or skin;

The feed-back system of the invention is based on the fact that synchronously with inhalation and exhalation, heart beat, the amplitude of muscle tension or of blood pressure of the patient, there is generated a surging or receding stimulus. This has the result that the human organism reacts in response to the sensory stimulus reaching the eye, ear or skin, which may be felt as disturbing or pleasant. This reaction occurs in the form of a modification of that bodily function from which a control signal has been derived, for instance from the breathing rhythm and/or from the amplitude of a sensed function. This produces, in turn, the result that the frequency or the amplitude of the sensory stimulus on the eye, ear or skin changes, and this change produces, in its turn, its effect on the functional system of inhalation, exhalation, heart frequency, muscle tension or blood pressure. In this way, a new equilibrium is gradually established, according to verification made after a few minutes, with respect to the frequency of breathing or the heart beat, the amplitude of the heart beat or muscle tension or blood pressure. This affects the psycho-vegetative nervous system of the organism represented in the central switching centres of the diencephalon and its peripheral executing organs. These types of "switching over" are characteristic of a functional change in the vegetative control of the whole organism as encountered during hypnosis, in deep or profound relation and in autogenous training.

The invention will now be described by way of example with reference to the accompanying drawing, the single Figure of which is a diagram showing the apparatus is use.

Referring to the drawing, an electrically resistive expansion measuring band 1 encircles the chest of a patient, and is electrically connected *via* a line 5 to an electronic control device 2. A line 6 couples the control device 2 to an electronic transducer 3 whence a further line 7 leads to the stimulus generator which is in the form of a lamp 4. Connections of the control device 2 and the transducer 3 to a mains supply are denoted by 8 and 9. The control device and the transducer together constitute an electronic control and transducing means.

WHAT I CLAIM IS:—

1. Apparatus for use in relaxation therapy comprising:—
 - i) a sensing device which in use senses a bodily function and provides an electrical signal corresponding in frequency and/or amplitude to the bodily function which is one of the following:— respiratory excursion motion; heart or pulse beat; muscle action; blood pressure;
 - ii) electronic control and transducing means; and
 - iii) a sensory stimulus generator adapted to stimulate the eye, ear or skin;
 the said signal being passed to the control and transducing means which in use produces and passes a transduced signal substantially unaltered in respect of the form of the said frequency and/or amplitude to activate the stimulus generator.
2. Apparatus according to claim 1, wherein the sensing device includes an electrically resistive expansion measuring band.
3. Apparatus according to claim 1, wherein the sensing device is a microphone or a plethysmograph.
4. Apparatus according to claim 1, wherein the sensing device is a myograph.
5. Apparatus according to claim 1, wherein the sensing device is a blood pressure meter.
6. Apparatus according to any preceding claim, wherein the stimulus generator is adapted to vary the amplitude or frequency of the stimulus.
7. Apparatus according to any preceding claim, wherein the stimulus generator is a lamp or lamps.
8. Apparatus according to any of claims 1 to 6, wherein the stimulus generator is an acoustic signal producing device.
9. Apparatus according to any of claims 1 to 6, wherein the stimulus generator is an electrical pulse generating device.
10. Relaxation therapy apparatus constructed and arranged substantially as herein described and shown in the accompanying drawing.

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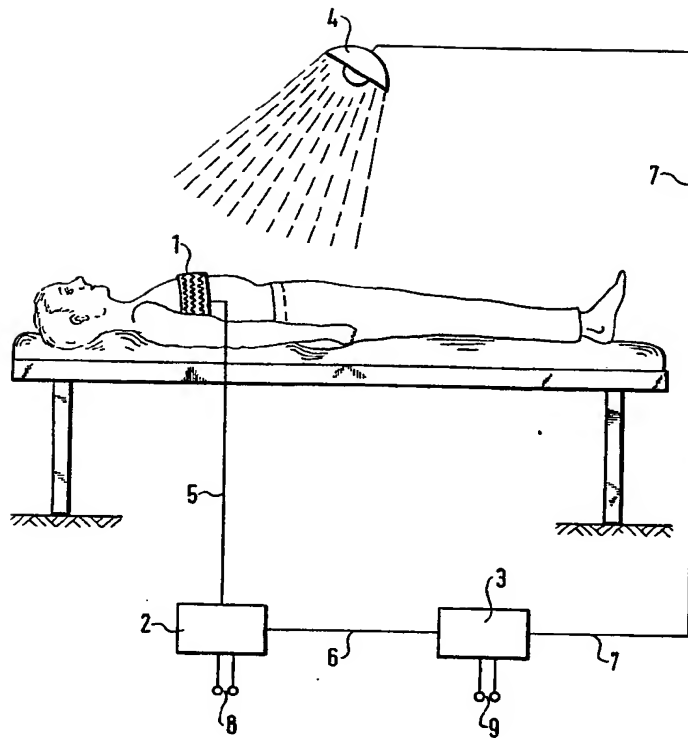
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COMPLETE SPECIFICATION

1 SHEET

*This drawing is a reproduction of
the Original on a reduced scale*



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